

### **USDA Foreign Agricultural Service**

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# Nigeria Oilseeds and Products Soybean Situation Report 2004

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### **Report Highlights:**

The AgOffice has revised Nigeria's soybean production and consumption estimates significantly upwards based on updated information from official and trade sources. The growth in the poultry industry fueled by the poultry meat import ban in 2002 has led to increased demand for soybean meal. Domestic production of meal (172,000 MT) currently does not meet the needs of the industry. Imports (30,000 MT) do not cover the supply deficit, as local producers do not have sufficient credit. The price of soybean meal is reportedly \$460/MT. Imports should increase in MY2004. For continued growth, the poultry industry needs to find credit resources for its small producers, more efficient means of production, and increase competition.

Includes PSD Changes: Yes Includes Trade Matrix: No Unscheduled Report Lagos [NI1]

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# **Executive Summary**

Nigeria's commercial poultry sector has grown from about 12 million birds (about 17,000 MT) in CY2001 to an estimated 40 million birds (55,000 MT) in CY2003 according to industry sources. The growth in the poultry sector has boosted demand for soybean meal, a vital and preferred source of protein in compound feed. Growth in domestic output of soybean meal is not keeping pace with the rapid growth in demand.

Nigeria's overall compound feed production in MY2003/04 is estimated at approximately 1.2 million MT. The soybean meal inclusion rate is less than 20 percent on average as meal output (172,000 MT) falls short of the 240,000 MT required for this rate. Soybean meal imports fall short of actual requirements due largely to lack of credit facilities to many users. Local soybean meal prices have for the last three years been more than double international prices because of the tight domestic supply.

The growth in poultry meat production has been absorbed by the expansion in the fast food sector. However, eventually, the growth will likely be stalled as high production costs and protection from imported product keep the price of poultry meat relatively high for the average Nigerian consumer. Currently, the retail price per pound (whole frozen bird) is close to US\$2.00.

Bulk vegetable oil is banned for imports. Consumer pack soybean oil is still imported.

Exchange Rate: US\$1 = 130 Naira

### **Production**

# **PSD Table: Oilseed Soybeans**

Nigeria								
Oilseed, Soybean								
	2002	Revised	2003	Estimate	2004	Forecast	UOM	
	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]		
Market Year Begin		10/2002		10/2003		10/2004	MM/YYYY	
Area Planted	125	390	125	400	0	410	(1000 HA)	
Area Harvested	125	390	125	400	125	410	(1000 HA)	
Beginning Stocks	0	0	0	10	0	10	(1000 MT)	
Production	115	380	115	400	115	410	(1000 MT)	
MY Imports	0	0	0	0	0	0	(1000 MT)	
MY Imp. from U.S.	0	0	0	0	0	0	(1000 MT)	
MY Imp. from the EC	0	0	0	0	0	0	(1000 MT)	
TOTAL SUPPLY	115	380	115	410	115	420	(1000 MT)	
MY Exports	0	20	0	20	0	20	(1000 MT)	
MY Exp. to the EC	0	0	0	0	0	0	(1000 MT)	
Crush Dom. Consumption	55	200	55	215	55	220	(1000 MT)	
Food Use Dom. Consump.	50	130	50	145	50	150	(1000 MT)	
Feed,Seed,Waste Dm.Cn.	10	20	10	20	10	20	(1000 MT)	
TOTAL Dom. Consumption	115	350	115	380	115	390	(1000 MT)	
Ending Stocks	0	10	0	10	0	10	(1000 MT)	
TOTAL DISTRIBUTION	115	380	115	410	115	420	(1000 MT)	
Calendar Year Imports	0	0	0	0	0	0	(1000 MT)	
Calendar Yr Imp. U.S.	0	0	0	0	0	0	(1000 MT)	
Calendar Year Exports	0	20	0	20	0	20	(1000 MT)	
Calndr Yr Exp. to U.S.	0	0	0	0	0	0	(1000 MT)	

Production estimates used in this report are considerably higher than those reported in 2001. The estimates are new figures released by the Central Bank of Nigeria (CBN). The data series are derived from CBN's national agricultural surveys conducted annually in collaboration with the Federal Office of Statistics and the Federal Ministry of Agriculture. AgOffice determined that these data series represent the most scientific and up-to-date measurement of soybeans production available in Nigeria. According to the CBN, Nigeria's soybean output is forecast to increase to 410,000 MT in 2004/05, up from 400,000 MT in 2003/04. The modest growth in soybean production is attributed to favorable grower prices, which results from the sustained increase in demand for the product. The growth in demand is fueled by GON's import ban on vegetable oil and poultry products introduced since July 2002, which boosted grower prices of soybeans and encouraged farmers to expand production.

## **PSD Table: Soybean Meal**

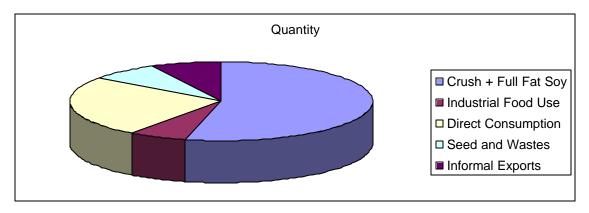
Nigeria								
Meal, Soybean								
	2002	Revised	2003	Estimate	2004	Forecast	UOM	
	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]		
Market Year Begin		10/2002		10/2003		10/2004	MM/YYYY	
Crush	55	200	55	215	55	220	(1000 MT)	
Extr. Rate, 999.9999	0.8	0.8	0.8	0.8	0.8	0.8	(PERCENT)	
Beginning Stocks	0	0	0	0	0	0	(1000 MT)	
Production	44	160	44	172	44	176	(1000 MT)	
MY Imports	55	30	65	30	80	40	(1000 MT)	
MY Imp. from U.S.	12	20	12	20	12	30	(1000 MT)	
MY Imp. from the EC	0	10	0	10	0	10	(1000 MT)	
TOTAL SUPPLY	99	190	109	202	124	218	(1000 MT)	
MY Exports	0	0	0	0	0	0	(1000 MT)	
MY Exp. to the EC	0	0	0	0	0	0	(1000 MT)	
Industrial Dom. Consum	0	0	0	0	0	0	(1000 MT)	
Food Use Dom. Consump.	0	0	0	0	0	0	(1000 MT)	
Feed Waste Dom. Consum	99	190	109	202	124	218	(1000 MT)	
TOTAL Dom. Consumption	99	190	109	202	124	218	(1000 MT)	
Ending Stocks	0	0	0	0	0	0	(1000 MT)	
TOTAL DISTRIBUTION	99	190	109	202	124	218	(1000 MT)	
Calendar Year Imports	0	20	0	30	0	40	(1000 MT)	
Calendar Yr Imp. U.S.	0	15	0	25	0	30	(1000 MT)	
Calendar Year Exports	0	0	0	0	0	0	(1000 MT)	
Calndr Yr Exp. to U.S.	0	0	0	0	0	0	(1000 MT)	

Nigeria has enormous capacity to increase soybean production, but output is increasingly lagging behind demand. An estimated 10 million hectares of Nigeria's arable land are deemed suitable for soybean cultivation, but no more than 265,000 hectares are planted with soybeans. Post's recent visit to northern soybean growing zones revealed a growing interest among farmers to increase area planted. However, increase in output is constrained by low input utilization and low yield levels. Average yield levels are approximately 1.0 MT/ha. Soybeans are produced on smallholder farms averaging no more than a hectare. Production is non-mechanized and family members usually provide labor.

Benue State is the dominant soybean producing area but several other states are showing interest in the crop. In Nigeria, soybean cultivation starts in May/June with land clearing, and ends in December when threshing and winnowing activities are concluded. Harvesting normally commences in late October and runs through December every year. The crop is harvested 3 - 4 months after planting, depending on the time of sowing and seed variety.

### Consumption

SOYBEAN L	JSE	QUANTITY	PERCENTAGE
2003/04			
Crush + full fat soy		215,000	54
Industrial Food use		25,000	6
Seed and Others		30,000	7.5
Direct Consump.	+	100,000	25
Residuals			
Informal Exports		30,000	7.5
Total		400,000	100



Sources: Central Bank of Nigeria Annual Report and industry estimates

**Crush----** Nigeria's installed annual soybean crushing capacity is estimated at approximately 400,000 MT. Eight large processors account for nearly 60 percent of Nigeria's soybean crush. Soybeans are crushed to obtain oil (for industrial and refined for food use) and to obtain soybean meal/cake for animal feed. At present, soybean oil represents a major complement to palm oil in the domestic supply picture for edible vegetable oil. The soap industry is a major user of soybean oil although significant quantities are also used by the local paint industry for making printing ink and cosmetic products. Demand for soybean oil, for industrial and food use far exceeds domestic production. Despite the domestic shortfall in output, bulk importation of all categories of vegetable oil is prohibited by the GON. Legal imports consist exclusively of branded soybean oil in consumer pack.

Soybean meal is the dominant and preferred protein ingredient in poultry feed rations. It should be noted that soybean crush estimates include full-fat soybeans used by some poultry operators. During harvest when prices are low, poultry operators use substantial quantity of full-fat soybeans to raise broilers for end-of-year festive season sales. According to industry estimates, Nigeria's soybean meal requirement in MY2003/04 is estimated at 240,000 MT (approximately 285,000 MT bean equivalent). Actual meal output from local crushers is estimated at 172,000 MT (approximately 215,000 MT in bean equivalent). A few big feed millers import a limited amount of soybean meal primarily for their own operations. The small-scale feed millers don't have the required capital for bulk imports and access to credit is also limited. Although the industry would prefer soybean meal inclusion rate of 30 percent, the high cost of the product is forcing producers to reformulate in favor of low quality substitutes such as peanut cake, cottonseed and palm kernel meal.

Industrial Use---- Leading infant food manufacturers in the country use soybeans because of its high nutritional value. Soybeans are also processed into powder for consumer convenience. Soybean oil is used in the local paint, cosmetics and soap making industries and it is a major complement to palm oil in the domestic supply picture for edible vegetable oil.

**Household**---- Direct human consumption of soybeans is significant in Nigeria, especially among rural low-income groups that cannot afford other alternative protein sources such as meat, fish and eggs. Beginning in the early 1990s, the International Institute of Tropical Agriculture (IITA) promoted the use of protein-rich and economical soybeans in everyday food to curb malnutrition. The IITA estimates the cost of protein, when purchased as soybean to be only about 10 - 20% of the cost of protein from meat, eggs, fish or milk. Soybeans are now widely consumed and are readily used in the production of soymilk, soy cake, soy yogurt and the fortification of local carbohydrate based Nigerian food staples. Dawadawa, a local food seasoning is also produced from soybeans. Government sources estimate that about 25 percent of Nigeria's domestic production is consumed directly in rural areas as human food. (Note that residuals of disappearances not accounted for in industrial use are included here).

### **Prices**

# Prices Table

Country Nigeria

Commodity Meal, Soybean

Prices in	Naira	per uom	Ton
Year	2002	2003	% Change
Jan	41,000	46,000	12%
Feb	41,000	47,000	15%
Mar	42,000	49,000	17%
Apr	43,000	55,000	28%
May	45,000	57,000	27%
Jun	50,000	60,000	20%
Jul	51,000	64,000	25%
Aug	53,000	68,000	28%
Sep	56,000	75,000	34%
Oct	50,000	70,000	40%
Nov	45,000	66,000	47%
Dec	45,000	60,000	33%

Exchange Rate 130/1 Local Currency/US \$
Date of Quote 8/23/04 MM/DD/YYYY

Source: Industry estimates

The average seasonal price of soybeans in 2003/04 was \$375/MT. At present, soybean meal is offered to poultry producers at \$460/MT. Soybean prices are usually lowest during the December - January harvest period, and rise to the peak during the June - July planting

season. Most farmers needing cash often sell their produce during the harvest period. Middlemen take maximum advantage of the situation to stock soybeans during harvest and release to the market as prices increase.

### **Trade**

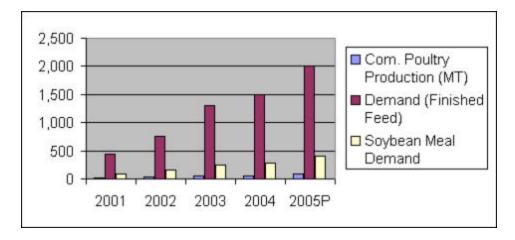
Nigeria began importing of soybean meal in 1999. Prior to this, the local feed industry was able to secure adequate supplies of soybean meal from the oilseed processing sector. Based upon Post's survey of the feed industry, we estimate total imports of soybean meal in calendar 2000 at 12,000 MT. Soybean meal imports increased to 21,000, 25,000 MT and 30,000 MT in 2001, 2002 and 2003, respectively.

Commercial imports of soybean meal are insufficient because Nigeria's small to medium-scale poultry operators have limited access to credit for bulk imports. Feed manufacturers importing U.S. soybean meal purchase loads of 3,000 - 5,000 MT, primarily for their own operations. Imported products are directed at satisfying demand in key poultry producing states in southwestern and southeastern Nigeria, close to the seaports. Feed mills located in the hinterland depend to a large extent, on local soybean meal. Local sources estimate informal cross-border exports of soybeans at 20,000 MT annually.

U.S. soybean meal exporters should explore using existing USDA export credit programs to stay ahead of competition in this price sensitive market. AgOffice can be contacted to identify credible Nigerian importers. Exporters can also arrange to meet with leaders of the Nigerian poultry industry at the annual International Poultry Exposition, Atlanta.

### **Poultry Production/Feed Requirement**

'000	2001	2002	2003	2004	2005P
Com. Poultry Production (MT)	17	30	50	56	84
Demand (Finished Feed)	440	750	1,300	1,500	2,000
Soybean Meal Demand	88	150	240	280	400



Source: Report of a Presidential Committee on Livestock 2003

# **Policy**

The import duty on soybeans and soybean meal for animal feed is 15 percent. In 2002, the GON implemented an import ban on bulk vegetable oil and imposed a high duty of 70 percent on branded vegetable oil, ostensibly to protect local producers.

## Marketing

In 2002, Post facilitated a trade-servicing visit of the American Soybean Association (ASA) to Nigeria, the first of such visits in more than two decades. As a follow-up to the visit, the ASA provided training in the United States to two Nigerians in modern soybean processing. The last three years in a row, FAS provided Cochran Fellowship training to three groups of poultry operators in poultry nutrition, feed and poultry management (altogether 80 people). The training programs were offered as add-on activities for delegates to the 2002, 2003 and 2004 International Poultry Exposition. The training programs were targeted at stimulating growth in the Nigerian poultry industry, as growth in the sector is a vital link to expanded imports of U.S. soybean meal and poultry genetics in the medium-term.

AgOffice is collaborating with the Poultry Association of Nigeria to encourage group purchases of U.S. soybean meal, utilizing USDA export credit facilities. Feed millers in Nigeria are familiar with the higher quality of U.S. soybean meal, especially with protein levels exceeding those commonly seen for EU products. Market opportunities of more than 60,000 MT of soybean meal exist for U.S. exporters. The U.S. is the leading exporter of soybean meal to Nigeria. Others are Brazil and the EU.

A Nigerian importer is currently importing branded U.S. soybean oil. The consumer-packaged product under the "Butcher Boy" label is gaining wide acceptance among Nigerian consumers. The importer regularly participates with AgOffice in our U.S. food shows and instore promotional activities in several locations across the country.